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PLEASE ENTER HOST PORT ID:
PLEASE ENTER HOST PORT ID:x
LOGINID:d185sxm
PASSWORD:
TERMINAL (ENTER 1, 2, 3, 4, OR ?):03
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*
*   The APS is available:
*       6:30am - 9:00pm Monday through Friday
*       7:30am - 5:00pm Saturday, Sunday, Holidays
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*   APS is unavailable Thanksgiving Day, Christmas Day,
*   and New Year's Day.
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FILE 'USPAT' ENTERED AT 12:57:51 ON 02 MAR 1999

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*           W E L C O M E   T O   T H E
*       U . S .   P A T E N T   T E X T   F I L E
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=> s parvovirus

L1 449 PARVOVIRUS

=> s l1 and vector

 67226 VECTOR
L2 284 L1 AND VECTOR

=> s l2 and therapy

 42477 THERAPY
L3 178 L2 AND THERAPY

=> s l3 and cancer

 26232 CANCER
L4 134 L3 AND CANCER

=> s l1 and autonomous

 5398 AUTONOMOUS
L5 20 L1 AND AUTONOMOUS

=> d 1-20

1. 5,869,040, Feb. 9, 1999, Gene therapy methods and compositions; Xiao-Oiang Oin, 424/93.21; 435/69.1, 320.1, 366; 536/23.5 [IMAGE AVAILABLE]
2. 5,853,716, Dec. 29, 1998, Genetically engineered chimeric viruses for the treatment of diseases associated with viral transactivators; Peter J. Tattersall, et al., 424/93.2, 93.6; 435/357, 372.3; 536/24.1 [IMAGE AVAILABLE]
3. 5,814,510, Sep. 29, 1998, Attenuated canine **parvovirus** vaccine; Colin R. Parrish, et al., 435/236; 424/186.1, 204.1; 435/235.1; 536/23.72, 24.1 [IMAGE AVAILABLE]
4. 5,801,030, Sep. 1, 1998, Methods and vectors for site-specific recombination; Duncan L. McVey, et al., 435/456, 320.1, 462; 536/23.1, 23.2 [IMAGE AVAILABLE]
5. 5,789,230, Aug. 4, 1998, Endosomolytically active particles; Matthew Cotten, et al., 435/235.1, 69.1, 236, 320.1; 514/2, 44 [IMAGE AVAILABLE]
6. 5,785,974, Jul. 28, 1998, Synthetic peptides and vaccines against **parvovirus**; Jose Ignacio Casal Alvarez, et al., 424/233.1, 185.1,

7. 5,780,280, Jul. 14, 1998, Recombinant adeno-associated virus vectors; Jane S. Lebkowski, et al., 435/457, 235.1, 320.1, 465 [IMAGE AVAILABLE]
8. 5,691,176, Nov. 25, 1997, Recombinant adeno-associated virus vector packaging cells and methods for use; Jane S. Lebkowski, et al., 435/457, 235.1, 320.1, 325, 465; 536/23.1 [IMAGE AVAILABLE]
9. 5,681,731, Oct. 28, 1997, Method for producing recombinant adeno-associated virus vectors; Jane S. Lebkowski, et al., 435/457, 320.1, 354, 366; 536/23.1 [IMAGE AVAILABLE]
10. 5,661,006, Aug. 26, 1997, DNA encoding the Canine coronavirus spike protein; Thomas David Kay Brown, et al., 435/69.3, 252.3, 320.1; 536/23.72 [IMAGE AVAILABLE]
11. 5,622,856, Apr. 22, 1997, High efficiency helper system for AAV vector production; Georges Natsoulis, 435/325, 69.1, 320.1, 348, 366, 367, 369; 536/23.72 [IMAGE AVAILABLE]
12. 5,589,377, Dec. 31, 1996, Recombinant adeno-associated virus vectors; Jane S. Lebkowski, et al., 435/369, 235.1, 320.1, 366, 367 [IMAGE AVAILABLE]
13. 5,585,254, Dec. 17, 1996, **Autonomous parvovirus** gene delivery vehicles and expression vectors; Ian H. Maxwell, et al., 435/465; 424/93.2, 405; 435/69.1, 70.3, 91.1, 91.21, 91.3, 91.31, 91.32, 235.1, 320.1; 536/23.1, 23.7, 24.1, 24.5 [IMAGE AVAILABLE]
14. 5,498,413, Mar. 12, 1996, Recombinant subunit vaccine against porcine **parvovirus**; Jose I. Casal Alvarez, et al., 424/233.1, 204.1, 818; 435/69.3, 320.1; 530/350, 826 [IMAGE AVAILABLE]
15. 5,424,065, Jun. 13, 1995, Vaccines containing avirulent phop-type microorganisms; Roy Curtiss, III, et al., 424/93.2, 93.48, 184.1; 435/69.1, 71.1, 252.3, 252.8 [IMAGE AVAILABLE]
16. 5,354,678, Oct. 11, 1994, Production of recombinant adeno-associated virus vectors; Jane S. Lebkowski, et al., 435/463, 235.1, 320.1, 366, 367, 369, 372 [IMAGE AVAILABLE]
17. 5,041,385, Aug. 20, 1991, Vector expressing fusion proteins and particles; Alan J. Kingsman, et al., 435/320.1; 424/192.1, 210.1; 435/69.3, 69.7, 91.41, 170, 171, 235.1, 252.3, 254.21; 436/543; 536/23.4, 23.7 [IMAGE AVAILABLE]
18. 4,744,984, May 17, 1988, Antiviral immunotherapeutic agent and preparation thereof; William L. Ragland, 424/282.1, 195.1, 283.1; 514/885, 937, 938 [IMAGE AVAILABLE]
19. 4,735,800, Apr. 5, 1988, Vaccines against rift valley fever virus; Marc S. Collett, et al., 424/186.1, 204.1; 435/69.3, 252.33, 849; 530/806; 536/23.7, 23.72, 24.1; 930/220 [IMAGE AVAILABLE]
20. 4,673,641, Jun. 16, 1987, Co-aggregate purification of proteins; Henry J. George, et al., 435/69.1, 69.3, 69.7, 69.8, 261, 320.1; 530/412, 418; 536/23.1, 23.4 [IMAGE AVAILABLE]

=> d ab 13

US PAT NO: 5,585,254 [IMAGE AVAILABLE]

L5: 13 of 20

ABSTRACT:

The present invention relates to novel recombinant **autonomous parvovirus** vectors, novel recombinant virus particles, and novel gene delivery vehicles that can be used to selectively target heterologous nucleic acid sequences to desired cell types and to selectively express such sequences in such desired cell types. Recombinant **autonomous parvovirus** gene delivery vehicles are particularly advantageous for transient gene therapy, and are especially well-suited to treat diseases in which there is rapid cell growth, such as cancer. Also included is the use of recombinant vectors of the present invention to produce RNA and protein products in cell culture.